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REMARKS

Claims 1-38 were pending as of the mailing date of the office action. The applicant has cancelled claims 22-25 and added claims 39 and 40. Currently, claims 1-21 and 26-40 are pending in this application, of which claims 1, 9, 14, 19, 26, 31, and 34 are independent. Favorable reconsideration of the office action mailed June 28, 2006 is respectfully requested in view of the foregoing amendments and the following remarks.

Claim rejections - 35 U.S.C. § 112

Claims 1 and 31 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In rejecting claims 1 and 31, the examiner asserted that "the word "may" in claim 1, line 8; in claim 31, line 9 is being indefinite for failing to particularly point out distinctly claim the subject matter which applicant regards as the invention."

The applicant disagrees. Claim I recites "releasing a previous lock level associated with the particular process so that the previous lock level may be associated with other processes."

While the use of the word "may" in other contexts may render a claim indefinite, the applicant contends that claim 1 is perfectly clear and definite, and that the word "may" in claim 1 does not cause the claim to be indefinite.

Claim 31 is also definite for similar reasons.

Claim rejections - 35 U.S.C. § 101

Claims 1-8, 14-25, and 31-38 were rejected under 35 U.S.C. 101. In rejecting claims 1-8, 14-18, 22-25, and 31-38, the examiner asserted that the claims

"recite "a method or computer program product". However, the claims fails [sic] to contain a concrete, useful, and tangible result so as to realize its [sic] functionality. Thus, the bodies of claims are merely abstract idea and is [sic] being processed without any links to a practical result in the technology arts and without computer manipulation."

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The applicant disagrees. The applicant notes that none of the claims recite "a method or computer program product." Claims 1-8 and 14-18 recite "A method," and claims 22-25 and 31-38 recite "A computer program product." Moreover, claims 1-8 and 14-18 are directed to methods that produce tangible results, e.g., scheduling access of a table by multiple processes, and controlling access to records in a database by processes running in parallel, all of which are not abstract but real. Claims 31 and 34 recite "A computer program product, tangibly stored on a machine-readable medium," which is hardware used to produce a concrete, useful, and tangible result.

In rejecting claims 19-21, the examiner asserted that the claims

"recite "a system". However, these claims fail to contain a computer or a hardware that is used to implement the system so as to produce a concrete, useful, and tangible result and to realize its functionality. Thus, the bodies of these claims are merely abstract idea and are being processed without any links to a practical result in the technology arts and without computer manipulation."

Without conceding the examiner's position, claim 19 has been amended. Claim 19 recites "a programmable processor," which is concrete, useful, and tangible, and not a mere abstract idea.

Claim rejections - 35 U.S.C. § 103

Claims 1-21 and 26-38 were rejected under 35 U.S.C. 103(a) as being unpatentable over Brenner (US 2002/0078119) in view of Walker (US 2004/0220933). Claims 1-21 and 26-38 were also rejected under 35 U.S.C. 103(a) as being unpatentable over Brenner in view of Chan (US 6108654).

Claims 1-8 and 31-33

In rejecting claims 1 and 31, the examiner asserted that paragraph [0053] of Brenner teaches "repeatedly attempting to associate the particular process with a lower lock level, and if the particular process has been successfully associated with the lower lock level, releasing a

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previous lock level associated with the particular process so that the previous lock level may be associated with other processes."

The applicant disagrees. Brenner discloses maintaining a FIFO queue for processes waiting to read or write to a shared resource (Abstract). A lock control structure is used to determine which process can access the resource (paragraph [0048]). When a process attempts to access the shared resource, and the lock is not available, the process is put to sleep (paragraph [0052]). When the lock is available, a queue manager wakens up one or more processes at or near the head of the queue that are waiting for the lock. Once a process is woken up, the process requests the lock. If the lock is available, the process is permitted to access the resource; and if the lock is not available, the process is put back to sleep. (paragraph [0053])

If the examiner contends that each position in the FIFO queue of Brenner corresponds to a lock level of claim 1, then Brenner does not disclose or suggest "the particular process repeatedly attempting to associate the particular process with a lower lock level," as recited in claim 1. Brenner discloses that each of the processes that are woken up checks to see whether the lock is available, but the process does not repeatedly attempt to associate itself with a lower lock level, or move down its position within the queue. In Brenner, a queue manager manages the queue and moves the processes down the queue, but the individual processes do not attempt to move themselves. (FIG. 4 and paragraph [0055])

Claims 2 to 8 are patentable for at least the same reasons as those applied to claim 1.

Claim 31 is patentable for at least reasons similar to those applied to claim 1.

Claims 32 and 33 are patentable for at least the same reasons as those applied to claim 31.

Claims 9-13 and 26-30

Brenner does not disclose or suggest second and third processes each "repeatedly attempting to associate itself with a lower lock level," as recited in amended claim 9, for at least reasons similar to those applied to claim 1.

Claims 10-13 are patentable for at least the same reasons as those applied to claim 9.

Claim 26 is patentable for at least reasons similar to those applied to claim 9.

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Claims 27 to 30 are patentable for at least the same reasons as those applied to claim 26.

Claims 14-18 and 34-38

Brenner does not disclose or suggest "enabling each of the processes to repeatedly attempt to associate itself with a lower lock level," as recited in amended claim 14, for at least reasons similar to those applied to claim 1.

Claims 15-18 are patentable for at least the same reasons as those applied to claim 14.

Claim 34 is patentable for at least reasons similar to those applied to claim 14.

Claims 35 to 38 are patentable for at least the same reasons as those applied to claim 34.

Claims 19-21

Brenner does not disclose or suggest "each of the different processes having a lock level other than the particular lock level repeatedly attempting to associate itself with another lock level that is closer to the particular lock level," as recited in amended claim 19, for at least reasons similar to those applied to claim 1.

Claims 20 and 21 are patentable for at least the same reasons as those applied to claim 19.

All of the dependent claims are patentable for at least the reasons for which the claims on which they depend are patentable.

Canceled claims have been canceled without prejudice or disclaimer.

Conclusion

The applicant respectfully requests that all pending claims be allowed.

Any circumstance in which the applicant has addressed certain comments of the examiner does not mean that the applicant concedes other comments of the examiner. Any circumstance in which the applicant has made arguments for the patentability of some claims does not mean that there are not other good reasons for patentability of those claims and other claims. Any circumstance in which the applicant has amended or canceled a claim does not mean that the applicant concedes any of the examiner's positions with respect to that claim or other claims.

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No fee is believed to be due. Please apply any charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: September 28, 2006 /Rex I. Huang/

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